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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/926,191	01/28/2002	Arno Hohmann	HOHM3001/JEK	4523
23364	7590	10/21/2003	EXAMINER	
BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314			PAIK, STEVE S	
			ART UNIT	PAPER NUMBER
			2876	

DATE MAILED: 10/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/926,191

Applicant(s)

HOHMANN ET AL.

Examiner

Steven S. Paik

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Receipt is acknowledged of the Amendment filed July 23, 2003.

Drawings

2. The drawings were received on July 23, 2003. These drawings are acceptable.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Minematsu et al. (US 4,864,109) in view of Dreifus (US 4,575,621).

Re claim 1, Minematsu et al. disclose a data carrier (a card shaped electronic bankbook 73) comprising a solar cell (9 in Fig. 1), in particular a smart card (73), comprising a carrier (col. 5, ll. 31-35) with at least an electronic circuit (CPU 1, program memory 2, data memory 3 and 4), a battery (8) and a display (5). The data carrier (73) further comprises a solar cell (9), which is electrically connected with the battery (col. 5, ll. 17-23).

Although Minematsu reference discloses all the physical elements of the claimed invention, the reference does not explicitly disclose relationship between the level of threshold voltage of the display (5) and the voltage level of the battery (8) for the purpose of detecting the usability or probability of use of the display.

Dreifus discloses a data carrier (2) comprises an electronic circuit, a display, a battery, and photocells. As will be appreciated by a person having ordinary skill in the art, during the operational mode, the photocells are powered by a light source (32) in a terminal and provide electrical power to the electronic circuit, memory and the display (16, see Abstract). During the standby mode of operation, the device monitors itself and receives power from the on-board battery. As the data carrier operates in different modes, mainly in stand-alone mode and operating mode, it receives additional power from a light source in a terminal. An interrupt control circuit (62) detects and monitors the conditions at the various elements of the card and generates an appropriate signal according to the detection process (col. 9, ll. 37-57). The monitoring and detecting process is obviously a form of detecting usability and/or probability of use of the display. Furthermore, the data carrier is not functioning as designed if no additional power through photocells is provided via external light source. By detecting the levels of other elements within the data carrier such as a display and a battery and minimizing the usage of them when it is not in the operating mode, the data carrier will not require high level voltage battery power and a solar power during the standby mode of operation.

In view of Dreifus reference, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to further employ the electronic circuit structure and teachings of Dreifus in addition to the data carrier of Minematsu et al. due to the fact that more economical and reliable control of the data carrier can be achieved by enabling the modes of operation in accordance with the needs of a user. Accordingly, it eliminates the unnecessary power consumption and increases the life of the battery. Furthermore, such modification of receiving additional power via an external light source during the operational mode to the

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teachings of Minematsu et al. would have been an obvious matter of design variation, well within the ordinary skill in the art, and therefore an obvious expedient.

Response to Arguments

5. Applicant's arguments filed July 23, 2003 have been fully considered but they are not persuasive.

The Applicant's remarks have been noted and fully considered. The Applicant argues mainly about the electrical connections of a battery and a solar cell and how the connections are distinctive from the cited prior arts.

The Examiner disagrees respectfully. As this Office Action discusses, Dreifus reference discloses two different modes of operations, a standby mode and an operational mode. The figures and the teachings disclosed in the Abstract and column fairly suggests that the electrical connections are serial. Dreifus further discloses a different ways to make connections in other electrical parts of the carrier. For example, he discloses the LED and phototransistors can be connected in series, in parallel, or in a series-parallel arrangement. As appreciated by an artisan in the art, the teachings shown in column 11 obviously suggest the serial electrical connections of a battery and a solar cell and the operational (threshold) voltage of display being higher than the voltage of the on-board battery. Otherwise, the display would be on during the standby mode powered by the on-board battery.

In accordance with above discussion, the claim remains rejected under 35 U.S.C. § 103 (a).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven S. Paik whose telephone number is 703-308-6190. The examiner can normally be reached on Mon - Fri (7:00am-3:30pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 703-305-3503. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0530.

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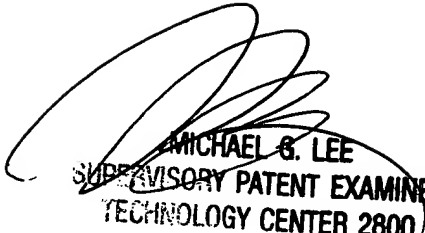
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Steven Paik

Steven S. Paik
Examiner
Art Unit 2876

ssp
October 17, 2003


MICHAEL B. LEE
SUPERVISORY PATENT EXAMINER
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